

IN THE CLAIMS

For the convenience of the Examiner all pending claims of the present Application are shown below whether an amendment has been made or not:

1. **(Currently Amended)** A method for recovering a communication session after failure of an endpoint, comprising:

establishing a communication session between a first user endpoint and a second user endpoint;

receiving keep alive signals from the first user endpoint;

detecting an interruption in the keep alive signals;

maintaining a connection with the second user endpoint after the interruption; **and**

determining that the interruption in keep alive signals resulted from failure of the first user endpoint and not as a result of a voluntary disconnection by a user of the first endpoint; and

reestablishing the communication session between the first user endpoint and the second user endpoint if the keep alive signals resume within a predetermined time period.

2. **(Original)** The method of Claim 1, further comprising transferring the communication session with the second endpoint from the first endpoint to a third endpoint if the keep alive signals do not resume within the predetermined time period.

3. **(Original)** The method of Claim 1, further comprising:

notifying the second endpoint that the first endpoint has failed; and

communicating a message to the first endpoint instructing the first endpoint to reboot.

4. **(Original)** The method of Claim 2, wherein:

the first endpoint is associated with a user in a directory relating a plurality of users to a plurality of endpoints;

the third endpoint is also associated with the user in the directory; and

the method further comprises:

determining the user associated with the first endpoint using the directory; and

determining that the third endpoint is also associated with the user.

5. **(Original)** The method of Claim 2, wherein the third endpoint is a voice mail system associated with a user of the first endpoint.

6. **(Previously Presented)** A method for recovering a communication session after failure of an endpoint, comprising:

establishing a communication session between a first user endpoint and a second user endpoint;

receiving keep alive signals from the first user endpoint;

detecting an interruption in the keep alive signals from the first user endpoint;

maintaining a connection with the second user endpoint after the interruption; and

transferring the communication session with the second user endpoint from the first user endpoint to a third user endpoint.

7. **(Previously Presented)** The method of Claim 6, wherein:

the first user endpoint is associated with a user in a directory relating a plurality of users to a plurality of endpoints;

the third user endpoint is also associated with the user in the directory; and

the method further comprises:

determining the user associated with the first user endpoint using the directory;

determining that the third user endpoint is also associated with the user; and

selecting the third user endpoint for the communication session.

8. **(Previously Presented)** The method of Claim 6, wherein:

the first user endpoint further comprises a reset button; and

the first user endpoint is further operable to stop communicating the keep alive signals in response to a user pressing the reset button.

9. **(Previously Presented)** The method of Claim 6, wherein the first and third user endpoints are interactive voice response (IVR) servers.

10. **(Previously Presented)** The method of Claim 9, further comprising:
storing status information for the first user endpoint; and
using the status information to resume the communication session with the third user endpoint from approximately a point at which the interruption in keep alive signals was detected.

11. **(Previously Presented)** A method for reestablishing a communication session, comprising:

establishing a communication session between a first user endpoint and a second user endpoint;

receiving from a user of the first user endpoint a user-generated message to reestablish the communication session; and

in response to the user-generated message, reestablishing the communication session between the second user endpoint and the user of the first user endpoint.

12. **(Original)** The method of Claim 11, wherein the step of reestablishing comprises transferring the communication session with the second endpoint from the first endpoint to a third endpoint associated with the user of the first endpoint.

13. **(Original)** The method of Claim 11, wherein the step of reestablishing comprises:

instructing the first endpoint to reset;

waiting a predetermined period of time for the first endpoint to reset; and

reestablishing the communication session between the first endpoint and the second endpoint if the first endpoint successfully resets during the predetermined period of time.

14. **(Previously Presented)** The method of Claim 13, wherein the step of reestablishing further comprises transferring the communication session with the second endpoint from the first endpoint to a third endpoint associated with the user of the first endpoint if the first endpoint does not successfully reset within the predetermined period of time.

15. **(Original)** The method of Claim 11, wherein the steps are performed by logic embodied in a computer readable medium.

16. **(Currently Amended)** A communication device, comprising:
an interface operable to receive keep alive signals from a first user endpoint in a communication session with a second user endpoint; and
a processor operable to:
detect an interruption in the keep alive signals;
maintain a connection with the first user endpoint after the interruption; ~~and~~
determine that the interruption in keep alive signals resulted from failure of the first user endpoint and not as a result of a voluntary disconnection by a user of the first endpoint; and
reestablish the communication session if the keep alive signals resume within a predetermined time period.

17. **(Original)** The communication device of Claim 16, wherein the processor is further operable to transfer the communication session with the second endpoint from the first endpoint to a third endpoint if the keep alive signals do not resume within a predetermined time.

18. **(Original)** The communication device of Claim 16, wherein the communication device comprises a call manager.

19. **(Original)** The communication device of Claim 16, wherein the communication session comprises a point-to-point communication session.

20. **(Original)** The communication device of Claim 19, wherein the point-to-point communication session is established using Session Initiation Protocol (SIP) or H.323.

21. **(Original)** The communication device of Claim 17, wherein transferring the communication session comprises:

determining an alternate endpoint associated with a user of the first endpoint; and
communicating a message to a call manager instructing the call manager to establish the communication session between the second endpoint and the alternate endpoint.

22. **(Original)** The communication device of Claim 19, wherein transferring the communication session comprises:

determining an alternate endpoint associated with a user of the first endpoint; and
communicating a message to the alternate endpoint instructing the alternate endpoint to reestablish the communication session with the first endpoint.

23. **(Original)** The communication device of Claim 16, wherein:
the first endpoint is coupled to a transport control protocol / Internet protocol (TCP/IP) network;

the communication device is coupled to the TCP/IP network; and
the keep alive signals comprise TCP/IP signaling information.

24. **(Original)** The communication device of Claim 16, wherein:
the first endpoint is coupled to an Internet protocol (IP) network carrying packets over User Datagram Protocol (UDP);

the communication device is coupled to the IP network; and
the keep alive signals comprise UDP signaling information.

25. **(Original)** The communication device of Claim 17, wherein:
the first endpoint comprises a voice-over-IP (VoIP) telephone; and
the third endpoint comprises a cellular telephone associated with a user of the VoIP telephone.

26. **(Previously Presented)** A communication device, comprising:
an interface operable to receive keep alive signals from a first user endpoint in a communication session with a second user endpoint; and
a processor operable to:
detect an interruption in the keep alive signals from the first user endpoint;
maintain a connection with the second user endpoint after the interruption; and
transfer the communication session with the second user endpoint to a third user endpoint.

27. **(Previously Presented)** The communication device of Claim 26, wherein the first and third user endpoints are interactive voice response servers (IVRs).

28. **(Previously Presented)** The communication device of Claim 26, wherein the processor is further operable to:
store status information for the first user endpoint; and
use the status information to resume the communication session with the third user endpoint from approximately a point at which the interruption in keep alive signals was detected.

29. **(Previously Presented)** The communication device of Claim 26, wherein:
the first user endpoint is coupled to a transport control protocol / Internet protocol (TCP/IP) network;
the communication device is coupled to the TCP/IP network; and
the keep alive signals comprise TCP/IP signaling information.

30. **(Previously Presented)** The communication device of Claim 26, wherein:
the first user endpoint is coupled to an Internet protocol (IP) network carrying packets over User Datagram Protocol (UDP); and
the keep alive signals comprise UDP signaling information.

31. **(Previously Presented)** The communication device of Claim 26, wherein the processor is further operable to transfer the communication session automatically in response to a message from the first user endpoint.

32. **(Currently Amended)** Logic embodied in a computer readable medium operable to perform the steps of:

establishing a communication session between a first user endpoint and a second user endpoint;

receiving keep alive signals from the first user endpoint;

detecting an interruption in the keep alive signals;

maintaining a connection with the second user endpoint after the interruption; **and**

determining that the interruption in keep alive signals resulted from failure of the first user endpoint and not as a result of a voluntary disconnection by a user of the first endpoint; and

reestablishing the communication session between the first user endpoint and the second user endpoint if the keep alive signals resume within a predetermined time period.

33. **(Original)** The logic of Claim 32, wherein the logic is further operable to perform the step of transferring the communication session with the second endpoint from the first endpoint to a third endpoint if the keep alive signals do not resume within the predetermined time period.

34. **(Original)** The logic of Claim 32, wherein the logic is further operable to perform the steps of:

notifying the second endpoint that the first endpoint has failed; and

communicating a message to the first endpoint instructing the first endpoint to reboot.

35. **(Original)** The logic of Claim 32, wherein:
the first endpoint is associated with a user in a directory relating a plurality of users to a plurality of endpoints;
the third endpoint is also associated with the user in the directory; and
the logic is further operable to perform the steps of:
determining the user associated with the first endpoint using the directory; and
determining that the third endpoint is also associated with the user.

36. **(Previously Presented)** Logic embodied in a computer readable medium operable to perform the steps of:
establishing a communication session between a first user endpoint and a second user endpoint;
receiving keep alive signals from the first user endpoint;
detecting an interruption in the keep alive signals from the first user endpoint;
maintaining a connection with the second user endpoint after the interruption; and
transferring the communication session with the second user endpoint from the first user endpoint to a third user endpoint.

37. **(Previously Presented)** The logic of Claim 36, wherein:
the first user endpoint is associated with a user in a directory relating a plurality of users to a plurality of endpoints;
the third user endpoint is also associated with the user in the directory; and
the logic is further operable to perform the steps of:
determining the user associated with the first user endpoint using the directory;
determining that the third user endpoint is also associated with the user.

38. **(Previously Presented)** The logic of Claim 36, wherein:
the first and third user endpoints are interactive voice response servers (IVRs); and
the logic is further operable to perform the steps of:
storing status information about the first user endpoint; and
using the status information to resume the communication session from approximately a point at which the interruption in keep alive signals was detected.

39. **(Previously Presented)** A system for recovering a communication session after failure of an endpoint, comprising:

means for establishing a communication session between a first user endpoint and a second user endpoint;

means for receiving keep alive signals from the first user endpoint;

means for detecting an interruption in the keep alive signals from the first user endpoint;

means for maintaining a connection with the second user endpoint after the interruption;

and

means for transferring the communication session with the second user endpoint to a third user endpoint.